

M&C No. 85-10

**LIMITED RETROFIT OF VICTOREEN MODELS 1A AND 1B AND THE
LANDERS, FRARY & CLARK (LFC) MODEL 1A, CD V-715
RADIOLOGICAL SURVEY INSTRUMENTS**

Background

For a long time we have been experiencing difficulty in obtaining acceptable 10^{10} and 10^{11} high-megohm resistors from the contractor. This has put the CD V-715 retrofit program at a standstill.

According to recent tests, a high percentage of unretrofitted CD V-715 instruments still meet operational requirements; therefore, these instruments can be an asset to the RADEF Instrument Program.

Based on the above, the following "Limited Retrofit" procedures for the LFC and Victoreen CD V-715 instruments are approved for State implementation.

VICTOREEN CD V-715 MODELS 1A AND 1B RADIOLOGICAL SURVEY INSTRUMENTS
(Reference Repair and Maintenance Manual for Radiological Instruments, Volume 3, Section 9.1)

1. Perform the entire retrofit procedure, except "High-Impedance Section Rework."
2. Process instruments through the CD V-794 calibrator.
3. Instruments passing the criteria set forth in Repair and Maintenance Manual for Radiological Instruments, Volume 3, Section 9.1, are acceptable for use in the RADEF Instrument Program.
4. Instruments failing these criteria on only the X10 and/or X100 ranges should have the appropriate high-megohm resistor replaced and reprocessed.
5. Place instruments failing these criteria in segregated storage until high-megohm resistors become available or until you are further advised.
6. Place all instruments stripped of the original high-megohm resistors before receiving this instruction in segregated storage.

LFC CD V-715 MODELS 1A AND 1B RADIOLOGICAL SURVEY INSTRUMENTS
(Reference Repair and Maintenance Manual for Radiological Instruments, Volume 3,
Section 7.1.)

1. Perform only Step 2 of "Disassembly."
2. Perform only Steps 1 and 2 of "Component Removal from PC Board."
3. Perform entire section, "Inspection of Defective Components."
4. Perform entire section, "Low-Impedance Section Rework."

Note: Do not perform "High-Impedance Rework," "High- and Low-Impedance Component Cleaning," and "Reassembly Procedure."

5. Perform Steps 1, 2, 3, 4, and 5 of "Precalibration Test."
6. Perform Steps 1, 2, and 3 of "Calibration."

Place all instruments that fail "Calibration," Step 1, because of low- or high-calibration reading on the X.I and XI ranges in segregated storage.

Process all instruments that meet the calibration requirements of "Calibration," Step 1, on the X.I ranges, even if there are signs of instability, as follows:

1. Replace the defective X10 or X100 high-megohm resistors, as indicated in "High-Impedance Rework."
2. Perform "High- and Low-Impedance Component Cleaning."
3. Perform "Precalibration Test."
4. Perform "Calibration."
5. Perform "End Retrofit/Test."

All instruments meeting the calibration requirements of "Calibration" are acceptable for use in the RADEF Instrument Program.

Place all instruments failing those calibration requirements in segregated storage until high-megohm resistors become available or until you are further advised.

Place all instruments that were stripped of the original high-megohm resistors before receiving this instruction in segregated storage.